

U.S. Patent Application Serial No. 09/752,939
Applicant: Gibbins, Bruce L., *et al.*

REMARKS

After Amendment, Claims 1-4, 6, 8, 12 and 21-39 are pending in the application. In this Response, Claim 1 was amended to more clearly claim the present invention, and amendments were made to other claims correct claim dependency or other minor amendments. New Claims 36-39 have been added. No new matter is believed to have been added.

Applicants appreciate the Examiner providing a personal interview on March 15, 2005. Applicants' representative met with Examiner Ghali and provided Examiner Ghali with an embodiment of the currently claimed invention. Claim 1 was discussed, as was the Gilchrist reference. Amendments to the claims were discussed, but no agreement was reached at that time. An Examiner Interview Summary Record was completed.

Applicants wish to point out that this application was lost at the U.S. Patent Office for a significant amount of time and through telephone conversations during the time of reconstruction of the file, Applicants have repeatedly requested a recalculation of the time lost. Applicants herein reiterate that request for the recalculation of the time lost due to loss of the actual file by the Patent Office.

Rejection of Claims 1-4, 6-10, 12, 21-36 under 35 U.S.C. §112, second paragraph

The Examiner rejected Claims 1-4, 6-10, 12, 21-36 under 35 U.S.C. § 112, second paragraph, as being indefinite because of the recitation of "enriched concentration". Applicants have amended the claims and the terms "enriched concentration" are no longer present. Applicants request the Examiner to withdraw this rejection.

Rejection of Claims 1-4, 6-10, 12, 21-36 under 35 U.S.C. § 103(a)

The Examiner rejected Claims 1-4, 6-10, 12, 21-36 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,187,290 to Gilchrist, *et al.* (Gilchrist), in view of U.S. Patent No. 5,792,090 to Ladin (Ladin). The Examiner stated "that it would have been obvious to one having ordinary skill in the art at the time of the invention to provide closed cell foam comprising polymer network and polysaccharide with gas entrapped in the foam as disclosed by

U.S. Patent Application Serial No. 09/752,939
Applicant: Gibbins, Bruce L., *et al.*

US '290 and replace the gas by oxygen as disclosed by US '090...." Applicants respectfully traverse this rejection.

As currently claimed, Applicants' invention is directed to a formed matrix material that includes a catalyst. The formed matrix is a solid or semi-solid flexible material. When this formed matrix material is exposed to a reactant solution a reaction occurs between the catalyst and the reactant solution, and a product of that reaction is a gas. The gas is formed at sites where the catalyst was incorporated in the solid or semi-solid formed matrix material. The currently claimed invention also comprises the formed matrix material with gas incorporated at sites in the matrix where the catalyst was located. The formation of gas at the sites of catalyst incorporation does not substantially alter the nature of the formed matrix material. The formed matrix material retains its solid or semi-solid characteristics and has substantially the same shape it had prior to gas formation. There is some slight distension in the formed matrix when gas bubbles are present, but the basic shape and nature of the formed matrix are unchanged.

Gilchrist provides a teaching of a foamable carrier and the foamable carrier undergoes a foaming process. The starting material of Gilchrist does not retain its shape before and after the foaming process. For example, Gilchrist teaches that the "present invention provides a closed container, containing therein a formulation as described above, said container being capable of expelling said formulation in the form of a foam." Gilchrist, Col. 2, lines 47-51. Gilchrist teaches the formation of a foam which is different in form from the starting material, the foamable carrier. "Prior to the foaming process, the foamable carrier is preferably in the form of a gel." Gilchrist, Col. 3, lines 5-6. The carrier itself must be capable of being blown into a foam. The foam that is formed by the foaming process also changes its form by subsiding due to collapse of the foam structure to form a foam sheet. See Gilchrist, Col. 3, lines 37-43. The starting material of Gilchrist is in one form, then altered by the foaming process to another form, and then when exposed to air, forms a third form, a collapsed foam.

Gilchrist does not provide a teaching of Applicants' currently claimed invention of a matrix material that substantially maintains its original shape and form before and after formation of a gas within the matrix material. Thus, Applicants' currently claimed formed matrix material is not rendered obvious by the teaching of a foamable carrier that undergoes a foaming process. The addition of the teaching of Ladin of providing oxygen, does not cure the

U.S. Patent Application Serial No. 09/752,939
Applicant: Gibbins, Bruce L., *et al.*

deficits of the teachings of Gilchrist. Oxygen incorporation, as taught by Ladin, into the foam of Gilchrist does not provide a teaching of a formed matrix material comprising a catalyst or of a formed matrix material comprising a gas. Applicants request the Examiner to withdraw the rejection.

Fee and Petition for Extension of Time

Applicants have enclosed a Petition for a one month extension of time and authorization to charge the Deposit Account No. 20-1507 in the amount of \$60.00 to cover the fee for a one month extension of time.

It is believed that no other fees are due. If, however, it is determined that fees are due, authorization is given to charge Deposit Account No. 20-1507.

Request for Refund of Issue Fee and Publication Fee

Applicants received the Notice of Withdrawal from Issue under 37 C.F.R. §1.313(b), mailed April 22, 2004. Applicants had timely paid the issue fee and publication fee on April 9, 2003, and then the file was lost by the U.S. Patent and Trademark Office, and no patent issued. Applicants request a refund in the amount of \$980 to be deposited to Deposit Account No. 20-1507.

Conclusion

The foregoing is a complete response to the Office Action mailed December 16, 2004. Applicants respectfully submit that Claims 1-4, 6, 8, 12 and 21-39 are patentable. Early and favorable consideration is solicited.

No fees other than the fee for one additional dependent claim are believed due; however, the Commissioner is hereby authorized to charge any other fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

U.S. Patent Application Serial No. 09/752,939
Applicant: Gibbins, Bruce L., *et al.*

If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities that remain in the application which may be corrected by the Examiner's amendment, a telephone call to the undersigned attorney at (404) 885-3652 is respectfully requested.

Respectfully submitted,



Mary Anthony Merchant, Ph.D.
Registration No. 39,771

TROUTMAN SANDERS LLP
Bank of America Plaza, Suite 5200
600 Peachtree Street, N.E.
Atlanta GA 30308-2216
Tel: 404.885.3652
Fax: 404.962.6527